

IN THE CLAIMS

Claims 1 and 81 are amended herein. All pending claims are reproduced below.

1. (Currently Amended) A system for printing time-based media data, the system comprising:

a user interface for receiving user input, the user input specifying a multimedia function to perform on the time-based media and specifying a distribution of processing power for carrying out the specified multimedia function, wherein carrying out the specified multimedia function includes selecting a range of the time-based media;

a printer, communicatively coupled to the user interface, the printer adapted to perform a first amount of processing satisfying the distribution of processing power indicated by the received user input, and to output an instruction to perform a second amount of processing satisfying the distribution of processing power indicated by the received user input; and

a processing device adapted to receive the instruction from the printer and perform the second amount of processing in response to the instruction from the printer.

2. (Original) The system of claim 1 wherein the processing device includes the user interface.

3. (Original) The system of claim 1 wherein the printer includes the user interface.

4. (Original) The system of claim 1 wherein the user interface is on a device separate from the processing device and the printer.

5. (Original) The system of claim 2, 3 or 4 wherein the user interface displays status information about the performance of the multimedia function.
6. (Original) The system of claim 1 wherein the processing device is a personal computer.
7. (Original) The system of claim 1 wherein the multimedia function includes selecting a range of audio data in response to received input from the user.
8. (Original) The system of claim 1 wherein the multimedia function includes applying audio event detection to the time-based media data.
9. (Original) The system of claim 8 wherein the multimedia function further includes determining a confidence level associated with the audio event detection.
10. (Original) The system of claim 1 wherein the multimedia function includes applying a speaker segmentation function to the time-based media data.
11. (Original) The system of claim 1 or 10 wherein the multimedia function includes applying a speaker recognition function to the time-based media data.
12. (Original) The system of claim 1 wherein the multimedia function includes applying a sound source localization function to the time-based media data.
13. (Original) The system of claim 12 wherein the multimedia function further includes applying audio event detection to the time-based media data.
14. (Original) The system of claim 1 wherein the multimedia function includes applying a speech recognition function to the time-based media data.

15. (Original) The system of claim 14 wherein the multimedia function includes applying a profile analysis function to the time-based media data.

16. (Original) The system of claim 14 wherein the multimedia function includes applying an audio event detection function to the time-based media data.

17. (Original) The system of claim 16 wherein the multimedia function further includes applying a speaker recognition function to the time-based media data.

18. (Original) The system of claim 16 wherein the multimedia function further includes applying a speaker segmentation function to the time-based media data.

19. (Original) The system of claim 16 wherein the multimedia function further includes applying a sound localization function to the time-based media data.

20. (Original) The system of claim 1 wherein the multimedia function includes selecting a range of video data in response to received input from the user.

21. (Original) The system of claim 1 wherein the multimedia function includes applying a video event detection function to the time-based media data.

22. (Original) The system of claim 1 wherein the multimedia function includes applying a color histogram analysis function to the time-based media data.

23. (Original) The system of claim 1 wherein the multimedia function includes applying a face detection function to the time-based media data.

24. (Original) The system of claim 23 wherein the multimedia function includes applying a clustering function to the time-based media data to merge multiple instances

of a face into a representative face image.

25. (Original) The system of claim 1 wherein the multimedia function includes applying a face recognition function to the time-based media data.

26. (Original) The system of claim 1 wherein the multimedia function includes applying an optical character recognition function to the time-based media data.

27. (Original) The system of claim 26 wherein the multimedia function further includes applying a clustering function to the time-based media data to merge similar results of the optical character recognition.

28. (Original) The system of claim 1 wherein the multimedia function includes applying a motion analysis function to the time-based media data.

29. (Original) The system of claim 1 or claim 28 wherein the multimedia function includes applying a distance estimation function to the time-based media data.

30. (Original) The system of claim 1 wherein the multimedia function includes applying foreground/background segmentation function to the time-based media data.

31. (Original) The system of claim 1 wherein the multimedia function includes applying a scene segmentation function to the time-based media data.

32. (Previously presented) The system of claim 31 wherein the multimedia function further includes applying a face recognition function to the time-based media data.

33. (Original) The system of claim 31 wherein the multimedia function further

includes applying a face detection function to the time-based media data.

34. (Original) The system of claim 31 wherein the multimedia function includes applying an optical character recognition function to the time-based media data.

35. (Original) The system of claim 34 wherein the multimedia function further includes applying a face recognition function to the time-based media data.

36. (Original) The system of claim 34 wherein the multimedia function includes applying a face detection function to the time-based media data.

37. (Original) The system of claim 1 wherein the multimedia function includes applying an automobile recognition function to the time-based media data.

38. (Original) The system of claim 37 wherein the multimedia function further includes applying a motion analysis function to the time-based media data.

39. (Original) The system of claim 1 wherein the multimedia function includes applying a license plate recognition function to the time-based media data.

40. (Original) The system of claim 1 wherein the multimedia function includes applying a visual inspection function to the time-based media data.

41. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a compact disc (CD) device.

42. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a digital video disc (DVD) device.

43. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control an audio tape device.

44. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a video tape device.

45. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a multimedia server.

46. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control encryption hardware.

47. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control audio sound localization hardware.

48. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control motion detection hardware.

49. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a MIDI player.

50. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a cellular telephone.

51. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a two-way radio.

52. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a world wide web display.

53. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a climate sensor.

54. (Original) The system of claim 1 wherein the user interface is configured to allow a user to control a radio receiver.

55. (Original) The system of claim 1 wherein the processor is further configured to display results of the multimedia function on the display of the user interface.

56. (Previously presented) The system of claim 1 wherein the processing device is a DVD drive.

57. (Previously presented) The system of claim 1 wherein the processing device is a CD drive.

58. (Previously presented) The system of claim 1 wherein the processing device is an audio tape drive.

59. (Previously presented) The system of claim 1 wherein the processing device is a video cassette device.

60. (Previously presented) The system of claim 1 wherein the processing device is a removable media device.

61. (Previously presented) The system of claim 1 wherein the processing device is an embedded audio recorder.

62. (Previously presented) The system of claim 1 wherein the processing device is an embedded video recorder.

63. (Previously presented) The system of claim 1 wherein the processing device is an non-volatile storage device.

64. (Previously presented) The system of claim 1 wherein the processing device is an embedded multimedia server.

65. (Previously presented) The system of claim 1 wherein the processing device is audio encryption hardware.

66. (Previously presented) The system of claim 1 wherein the processing device is video encryption hardware.

67. (Previously presented) The system of claim 1 wherein the processing device is audio sound localization hardware.

68. (Previously presented) The system of claim 1 wherein the processing device is a cellular telephone.

69. (Previously presented) The system of claim 1 wherein the processing device is a two-way radio.

70. (Previously presented) The system of claim 1 wherein the processing device is a world-wide web display.

71. (Previously presented) The system of claim 1 wherein the processing device is a radio receiver for receiving AM signals.

72. (Previously presented) The system of claim 1 wherein the processing device is a radio receiver for receiving FM signals.

73. (Previously presented) The system of claim 1 wherein the processing device is a radio receiver for receiving short wave signals.

74. (Previously presented) The system of claim 1 wherein the processing device is a satellite radio receiver.

75. (Previously presented) The system of claim 1 wherein the processing device is a weather alert receiver.

76. (Previously presented) The system of claim 1 wherein the processing device is an emergency alert monitor for receiving emergency broadcast system alerts.

77. (Previously presented) The system of claim 1 wherein the processing device is hardware for performing VGA screen captures.

78. (Previously presented) The system of claim 1 wherein the processing device is hardware for performing audio capture.

79. (Previously presented) The system of claim 1 wherein the processing device is hardware for capturing data from an electronic pen.

80. (Previously presented) The system of claim 1 wherein the processing device is a disposable media writer.

81. (Currently Amended) A method for printing time-based media, the method comprising:

receiving time-based media data from a media source;

receiving user input, the user input specifying a multimedia function to perform on the time-based media and specifying a distribution of processing power

between a printer and a processing device to carry out the specified multimedia function, wherein carrying out the specified multimedia function includes selecting a range of the time-based media; determining a first portion of the processing to be allocated to the printer and a second portion of the processing to be allocated to the processing device satisfying the distribution of processing power specified by the user input; allocating the determined processing portions to the printer and the processing device based on the distribution of processing power specified by the user input; performing, by the printer, the allocated first portion of processing to carry out the specified multimedia function; performing, by the processing device, the allocated second portion of processing to carry out the specified multimedia function; producing a printed output on the printer associated with comprising a first representation the processed time-based media data; and producing an electronic output associated with comprising a second representation of the processed time-based media data.

82. (Original) The method of claim 81 wherein the user input is received at the printer.

83. (Original) The method of claim 81 wherein the user input is received at the processing device.

84. (Original) The method of claim 81 wherein the processing device is a personal computer.

85. (Original) The method of claim 81 wherein the multimedia function includes

selecting a range of audio data in response to received input from the user.

86. (Original) The method of claim 81 wherein the multimedia function includes applying audio event detection to the time-based media data.

87. (Original) The method of claim 86 wherin the multimedia function further includes determining a confidence level associated with the audio event detection.

88. (Original) The method of claim 81 wherein the multimedia function includes applying a speaker segmentation function to the time-based media data.

89. (Original) The method of claim 81 or 88 wherein the multimedia function includes applying a speaker recognition function to the time-based media data.

90. (Original) The method of claim 81 wherein the multimedia function includes applying a sound source localization function to the time-based media data.

91. (Original) The method of claim 90 wherin the multimedia function further includes applying audio event detection to the time-based media data.

92. (Original) The method of claim 81 wherein the multimedia function includes applying a speech recognition function to the time-based media data.

93. (Original) The method of claim 92 wherin the multimedia function includes applying a profile analysis function to the time-based media data.

94. (Original) The method of claim 92 wherein the multimedia function includes applying an audio event detection function to the time-based media data.

95. (Original) The method of claim 94 wherein the multimedia function further includes applying a speaker recognition function to the time-based media data.

96. (Original) The method of claim 94 wherein the multimedia function further includes applying a speaker segmentation function to the time-based media data.

97. (Original) The method of claim 94 wherein the multimedia function further includes applying a sound localization function to the time-based media data.

98. (Original) The method of claim 81 wherein the multimedia function includes selecting a range of video data in response to received input from the user.

99. (Original) The method of claim 81 wherein the multimedia function includes applying a video event detection function to the time-based media data.

100. (Original) The method of claim 81 wherein the multimedia function includes applying a color histogram analysis function to the time-based media data.

101. (Original) The method of claim 81 wherein the multimedia function includes applying a face detection function to the time-based media data.

102. (Original) The method of claim 101 wherein the multimedia function includes applying a clustering function to the time-based media data to merge multiple instances of a face into a representative face image.

103. (Original) The method of claim 81 wherein the multimedia function includes applying a face recognition function to the time-based media data.

104. (Original) The method of claim 81 wherein the multimedia function

includes applying an optical character recognition function to the time-based media data.

105. (Original) The method of claim 104 wherein the multimedia function further includes applying a clustering function to the time-based media data to merge similar results of the optical character recognition.

106. (Original) The method of claim 81 wherein the multimedia function includes applying a motion analysis function to the time-based media data.

107. (Original) The method of claim 81 or claim 106 wherein the multimedia function includes applying a distance estimation function to the time-based media data.

108. (Original) The method of claim 81 wherein the multimedia function includes applying foreground/background segmentation function to the time-based media data.

109. (Original) The method of claim 81 wherein the multimedia function includes applying a scene segmentation function to the time-based media data.

110. (Previously Presented) The method of claim 109 wherein the multimedia function further includes applying a face recognition function to the time-based media data.

111. (Original) The method of claim 109 wherein the multimedia function further includes applying a face detection function to the time-based media data.

112. (Original) The method of claim 109 wherein the multimedia function includes applying an optical character recognition function to the time-based media data.

113. (Original) The method of claim 112 wherein the multimedia function further includes applying a face recognition function to the time-based media data.

114. (Original) The method of claim 112 wherein the multimedia function includes applying a face detection function to the time-based media data.

115. (Original) The method of claim 81 wherein the multimedia function includes applying an automobile recognition function to the time-based media data.

116. (Original) The method of claim 115 wherein the multimedia function further includes applying a motion analysis function to the time-based media data.

117. (Original) The method of claim 81 wherein the multimedia function includes applying a license plate recognition function to the time-based media data.

118. (Original) The method of claim 81 wherein the multimedia function includes applying a visual inspection function to the time-based media data.